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Amendments to Claims

1. (Previously Presented) An electrically conductive film, comprising:

A. a continuous or discontinuous, non-conductive first phase comprising a polyimide base polymer, and

B. a discontinuous, conductive second phase comprising 80, 85, 90, 95, 96, 97, 98, 99 or 100 weight percent carbon nanotube particles, wherein the weight percent of the second phase, based upon the total weight of both phases, is in a range between any two of the following percentages: 0.10, 0.20, 0.30, 0.40, 0.50, 0.75, 1.0, 2.0, 3.0, 4.0, 5.0, 10.0,

wherein the film has a thickness between eight and 125 microns,

wherein the film precursor is oriented on a molecular scale in one or more directions to provide a surface electrical resistivity between, and including, any two of the following 1×10^3, 1×10^4, 1×10^5, 1×10^6, 1×10^7 ohms per square,

wherein the film precursor is oriented on a molecular scale in one or more directions to provide a volume electrical resistivity between, and including, any two of the following 1×10^8, 1×10^9, 1×10^{10}, 1×10^{11}, 1×10^{12}, 1×10^{13}, 1×10^{14}, and 1×10^{15} ohms•cm, and

wherein the film has a mechanical elongation in a range between and including any two of the following 50, 60, 70, 75, 80, 85, 90, 95 and 100 percent.

2. (Previously Presented) An electrically conductive layer according to Claim 1, wherein the volume electrical resistivity is in a range between and including any two the following: 1×10^{12}, 1×10^{13}, 1×10^{14}, and 1×10^{15} ohm-centimeters.

3. (Canceled).

4. (Canceled).

5. (Currently Amended) An electrically conductive ~~layer~~ <u>film</u> according to Claim 1, wherein the layer provides a mechanical elongation of between 50 and 80 percent.

6. (Canceled).

7. (Currently Amended) A process for making an electrically conductive polyimide film comprising:

(a) dispersing ~~a~~ carbon nanotube particles into a polar organic solvent to form a slurry;
(b) mixing the slurry with a polyamic acid derived from a reaction of substantially equimolar amounts of at least one dianhydride and at least one diamine in a polar organic solvent to form a mixed polymer;
(c) casting the mixed polymer of step (b) onto a surface;
(d) converting and drawing the cast mixed polymer of step(c) to provide a layer with a solids content of from 95 to 99.99 weight percent and a base polymer that is from 90 to 99.99 percent imidized, wherein the polymer is in the form of a film having a thickness of between eight and 125 microns and having a mechanical elongation between any two of the following numbers 50, 60, 70, 75, 80, 85, 90, 95 and 100 percent, wherein the film precursor is oriented on a molecular scale in one or more directions to provide a surface electrical resistivity between, and including, any two of the following 1×10^3, 1×10^4, 1×10^5, 1×10^6, 1×10^7 ohms per square, and wherein the film ~~or a~~ precursor ~~thereto~~ is oriented on a molecular scale in one or more directions to provide a volume electrical resistivity between, and including, any two of the following 1×10^8, 1×10^9, 1×10^{10}, 1×10^{11}, 1×10^{12}, 1×10^{13}, 1×10^{14}, and 1×10^{15} ohms•cm.

8. (Previously Presented) The process of Claim 7 wherein the film has a surface resistivity in a range from 1×10^3 to 1×10^6 ohms per square.

9. (Previously Presented) The process of Claim 7 wherein the film has a volume resistivity in a range from 1×10^8 to 1×10^{12} ohms•cm.

10. (Original) The process of Claim 7 wherein the conversion of step (d) comprises a thermal conversion step.

11. (Previously Presented) The process of Claim 7 wherein the film contains dispersed therein from 0.10 to 5.0 weight percent of carbon nanotube particles.

12. (Previously Presented) The process of Claim 7 wherein the film contains dispersed therein from two to five weight percent of carbon nanotube particles.